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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/724,389 | 11/25/2003 | Chen-Lee Chen | PUSA031017 | 9648 |
| 23595 | 7590 | 12/15/2006 | EXAMINER | |
| NIKOLAI & MERSEREAU, P.A. 900 SECOND AVENUE SOUTH SUITE 820 MINNEAPOLIS, MN 55402 | | | PAUL, DISLER | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2635 | |

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/724,389 | CHEN, CHEN-LEE | |
| | Examiner | Art Unit | |
| | Disler Paul | 2635 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. ("US 6,430,353") in view of Deruginsky et al. ("US 2003/0223592 A1") and Woo et al. ("US 2005/0190932 A1").

Re claim 1, Honda et al. discloses a speaker matcher ("fig.1A-B"), comprising: a plurality of selective switches each having a first side and a second side ("fig.1A/12,22,32;col.2 line 34-40"); a first input terminal externally connected to a plurality of audio sources ("fig.1A/11-1;col.2 line 29-33-(11-11n)denotes first input terminal") and having a side connected to the first side of each of the selective switches ("fig.1A/(11-11n)is connected to side of switches (12)"); a second input terminal externally connected to a plurality of audio sources that have not been amplified by the signals ("fig.1A/(17-18); col.2 line 34-40"); and having a side connected to the second side of each of the selective switches ("fig.1A/(17-18)is connected to side of switches (22)"); a plurality of power amplifying circuits ("fig.1B/(15,25); col.2 line 46 & 67") each having a first side

connected to the second side of each of the selective switches ("fig.1A-B/-power amp(15,25) is connected to selective switches(12,22)respectively") ; a plurality of press switches each having a first side connected to each of the selective switches ("fig.1A/Press switches(13,23)is connected to selective switches(12,22 respectively)") ; a plurality of volume control switches each having a first side connected to a second side of each of the press switches ("col.5 line 30-32; col.2 line 45; fig.1A/switch(14)connect to press switch(13)") ; and a plurality of speaker output terminals each having a first side connected to a second side of each of the volume control switches and a second side connected to a plurality of speakers ("fig.1B/output terminals(16,36)is couple to speakers(19l-R) and volume switch(13);col.2 line 47").

However, Honda et al. fail to disclose the audio sources being amplified by signals prior to entering the first input terminal.

Deruginsky et al. discloses a microphone assembly in which audio signals are amplified prior to entering the input terminals ("Deruginsky,fig.1/preamplifier(10) at input terminal(11);page 3[0047] line 1-3") for purpose of amplifying audio signals to an appropriate level for converting analog to digital signals.

Therefore, taking the combine teaching of Honda et al. and Deruginsky et al. as a whole, one skill in the art would have found it obvious to modify Honda et al. to incorporate the audio sources being amplified by signals prior to entering the first input terminal for

the purpose of amplifying audio signals to an appropriate level for converting analog to digital signals.

The combine teaching of Honda et al. and Deruginsky et al. fails to teach the limitation of having the power amplifying circuit with a second side connected to the first side of each of the selective switches.

However, Woo et al. disclose a stereophonic apparatus ("woo, fig. 4/amplifying circuit (230) is connected to first side of selecting switches (258); page 5[0062] line 1-9") for the purpose of hearing both the audio and sound signals equally.

Therefore, taking the combine teaching of Honda et al. and Deruginsky et al. and Woo et al as a whole, one skill in the art would have found it obvious to incorporate having the power amplifying circuit with a second side connected to the first side of each of the selective switches for the purpose of hearing both the audio and sound signals equally.

Re claim 2, the speaker matcher in accordance with claim 1, wherein the power amplifying circuits are connected to smaller signal contacts of each of the selective switches ("Woo, page 5[0062] line 9-14-only lower power level of audio signals are amplified").

Re claim 3, the speaker matcher in accordance with claim 1, wherein each of the selective switches has a plurality of switch stages connected to the first input terminal, the second input

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terminal and the power amplifying circuits("Honda,col.1 line 45-53;switch(12) has plurality of switch stages which couple to power amplifier and terminals for choosing stage sound among many").

Re claim 4, the speaker matcher in accordance with claim 1, wherein each of the selective switches has a plurality of switch stages connected to the press switches("Honda,fig.1A/plurality of switch stages in (#12) is connected to press switches(#13)"), so that input audio sources are selectively switched for use of different rooms("Honda,col.1 line 25-28; col.2 line 15-20")

Re claim 5, the speaker matcher in accordance with claim 1, wherein the press switches are connected between the selective switches and the volume control switches, so that the input audio sources are selectively switched for use of different rooms("Honda,fig.1A/press switches(13) is in between selective switch(#12) and volume control swich(#14)").

Re claim 6, the speaker matcher in accordance with claim 1, wherein the volume control switches are connected between the press switches and the speaker output terminals("Honda,fig.1A/(#14) is connected between (#14-vol.switch) and (#16-output terminal)") and are connected to the selective switches through the press switches to control the volume output of different rooms("Honda,col.4 line 58-62;col.5 line 1-5;col.5 line 50-55; fig.1/(rooms#1,2)").

Re claim 7, the speaker matcher in accordance with claim 1, wherein each of the volume control switches have means to function as a matching impedance ("Honda, fig. 1A/(#14,24)-variable resistors as mean function as matching impedance").

However, the combined teaching of Honda et al., Deruginsky et al. and Woo et al as a whole, fails to disclose such mean as being specifically the plurality of coils. But this limitation is commonly known in the art. Thus, one skill in the art would have found it obvious to use a plurality of coils as claimed to function as matching impedance. Official Notice is taken.

Re claim 8, the speaker matcher in accordance with claim 1, wherein each of the selective switches is switched to a different audio source ("Honda, fig. 1A/swithes (12,22)"), each of the press switches is used to control use of the audio source ("Honda, col.2 line 37-38; col.2 line 60-61-switches(#13,23) monitor audio signal"), each of the volume control switches is used to control the volume of the audio source ("Honda, col.4 line 58-62; col.5 line 1-5; col.5 line 50-55"), and each of the speaker output terminals is used to output the audio source to the speakers of the respective room ("Honda, fig. 1B/-output speakers (16,26) to output audio source to respective rooms (1,2)").

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Wheeler et al. ("US 6,826,283 B1") pertains to method and system of playing different audio signals in different node environments.

Toda et al. ("US 7,130,435 B1") pertains to selection of signals among plurality of signals components.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Disler Paul whose telephone number is 571-272-2222. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on 571-272-2000. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DP


VU LE
SUPERVISORY PATENT EXAMINER